



Marcelo de Mello Camanho

A Model for Stream-based Interactive Storytelling

Tese de doutorado

Thesis presented to the Programa de Pós-Graduação em Informática, of the Departamento de Informática do Centro Técnico Científico da PUC-Rio, as partial fulfillment of the requirements for the degree of Doutor.

Advisor: Prof. Bruno Feijó

Rio de Janeiro

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Abstract

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In this thesis we present a highly scalable architecture for massive multi-user interactive storytelling systems based on video streams. The proposed architecture can support different demands for interactivity, generation, and visualization of stories in digital television environments, which include TV set-top boxes, tablets, smartphones, and computers. In this architecture, the same story adapts itself to the spectator's device in terms of rendering and interface processes automatically. Also a model for sharing massive interactive stories is presented. Moreover, the proposed system preserves the logical coherence of the story that unfolds while keeping it interactive.

Keywords

Interactive Storytelling, Massive Digital Entertainment, Streaming, Cross-media games, TV.

Resumo

Camanho, Marcelo; Feijó, Bruno. **Um modelo para storytelling interativo baseado em streaming de vídeo**. Rio de Janeiro, 2014. 92p. DSc Thesis - Departamento de Informática, Pontifícia Universidade Católica do Rio de Janeiro.

Nesta tese é apresentada uma arquitetura altamente escalável para storytelling interativo em massa baseado em streams de vídeo. A arquitetura proposta pode suportar diferentes demandas para interatividade, geração e visualização de histórias em ambientes de televisão digital, que inclui set-top boxes de TV, tablets, smartphones e computadores. Nesta arquitetura, a mesma história se adapta ao aparelho do espectador em termos de renderização e processo de interface automaticamente. Também é apresentado um modelo para compartilhar histórias interativas em massa. Além disso, o sistema proposto preserva a coerência lógica da história que se desenrola enquanto a mantém interativa.

Palavras-chave

Storytelling Interativo, Entretenimento Digital em Massa, Streaming, Jogos multiplataforma, TV.

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